

## Predation of a Common Scaly-foot *Pygopus lepidopodus* by an Eastern Small-eyed Snake *Cryptophis nigrescens* in New South Wales

The Eastern Small-eyed Snake *Cryptophis nigrescens* is a small nocturnal elapid found along the east coast of Australia from Melbourne in Victoria to Cooktown in Queensland (Cogger 2014). During the cooler months of the year, the species frequently shelters beneath exfoliated rocks (Webb *et al.* 2004) and is often found in small aggregations (Scott *et al.* 2013). The Eastern Small-eyed Snake actively forages for food (Webb *et al.* 2003) and is thought to prey principally on small scincid lizards, although it has been reported consuming a variety of other reptile prey in low numbers (Shine 1984). For example, Shine (1984) examined the gut contents of Eastern Small-eyed Snakes from Australian Museum, Queensland Museum, National Museum of Victoria and Australian National Wildlife Collection and found snakes from NSW included prey items such as the Copper-tailed Skink *Ctenotus taeniolatus*, Delicate Skink *Lampropholis delicata*, Garden Skink *L. guichenoti*, Weasel Skink *Saproscincus mustelinus*, *Eulamprus* sp. and a single Mustard-bellied Snake *Drysdalia rhodogaster*. A similar dietary composition was reported for Victorian specimens (Shine 1984). Queensland specimens, however, contained a much broader range of scincid lizards, as well as a Burton's Snake-lizard *Lialis burtonis*, *Ramphotyphlops* sp. and several additional small elapids (Shine 1984). Presumably the dietary breadth of Queensland snakes is due to the greater diversity of species available.

Here we report an instance of predation by the Eastern Small-eyed Snake on the Common Scaly-foot *Pygopus lepidopodus* (Pygopodidae) from Booderee National Park (Jervis Bay Territory). Booderee National Park is located 200 km south of Sydney and 20 km south of the city of Nowra on the south coast of New South Wales, south-eastern Australia (approximate midpoint is 35°10' S, 150° 40' E). The area has a temperate maritime climate with an average rainfall of 1150 mm per annum spread relatively evenly over the year.

On 21 May 2014 at 0940 hours, a male Eastern Small-eyed Snake (snout vent length (SVL) = 511 mm; mass 67 g) was captured between two sheets of corrugated galvanised steel that had been placed within the park for the purpose of monitoring reptiles (see Michael *et al.* 2012 for methodology on using artificial refuges). The snake was placed into a calico handling bag and held overnight as part of a life-history study on the species (Australian National University Animal Care and Ethic Approval No: A2014/02). On 22 May at 0830 hours, the handling bag was opened and on inspection an adult Common Scaly-foot (total length = 315 mm; SVL = 162 mm; mass 21 g) was found to have been regurgitated by the snake (Fig. 1). The nape had obvious signs of necrosis and bite marks were evident along the entire length of the lizard.

The Common Scaly-foot is a diurnal species that actively forages for arthropods (Patchell and Shine 1984; Wall *et al.* 2013), and was presumably captured by the snake during the previous night while the lizard was inactive (maximum and minimum temperature for 20 May was 22.4°C and 16.5°C respectively). The habitat in which the snake was captured is described as an ecotone between dry heathland dominated by Heath Banksia *Banksia ericifolia*, Scrub She-oak *Allocasuarina distyla*, Broad-leaved Drumsticks *Isopogon anemonifolius* and Dagger Hakea *Hakea teretifolia*, and dry forest dominated by Turpentine *Syncarpia glomulifera*. This observation represents the first record of an Eastern Small-eyed Snake preying on a legless lizard in NSW and suggests this species may have a much broader diet than previously thought, possibly including relatively large prey items.

### Acknowledgements

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Fig. 1. A Common Scaly-foot *Pygopus lepidopodus* regurgitated by an adult male Eastern Small-eyed Snake *Cryptophis nigrescens* from Booderee National Park. Photo by D Michael.

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